

DoD Space Planning Criteria for Health Facilities

Information Management

2.4.1. PURPOSE AND SCOPE:

This section provides guidance for the space planning criteria for information systems in DoD medical facilities. These criteria provide the space necessary to adequately accommodate information systems management operations, telephone switchboard, central control and computer center.

2.4.2. DEFINITIONS:

Active Data Storage Room - Area where tape or removable disk backups of active data files are stored.

Ambulatory Data System (ADS) - Provides ambulatory data as a by-product of the health care delivery process. The ADS captures patient specific encounter, diagnostic, and treatment data.

Archived Storage - Secured area for storage of inactive media such as microfiche and tapes used as backup. Also included in this area are original copies of PC software.

Audiovisual Distribution System – A separate communications equipment room, with sufficient space for personnel circulation and equipment maintenance, will be provided in hospitals and medical centers for the head end equipment, such as television, public address and program distribution, radio, and data communications equipment room. This room should be adjacent to the telephone systems equipment room.

Central Alarm Room: A central room for medical gas alarms, elevator alarm/telephone, pneumatic tubes system, fire alarm panels, environmental control systems, wall mounted graphic displays, annunciator displays and other monitoring and control equipment. This room might also contain the security cameras and security videotaping equipment. This room needs to be monitored the entire time the medical facility is in operation. It usually is located in either emergency room or facility management.

Central Reproduction – A central copy area for the entire medical facility, for large-scale reproduction requirements not normally performed in smaller department copy areas.

Centralized Credentials and Quality Assurance System (CCQAS) - A system, which supports DoD's quality assurance program by maintaining the credentials status of DoD healthcare providers.

CHAMPUS Detail Information System (CDIS) - Supports online, near real-time accessing and retrieval of individually detailed CHAMPUS information.

Communications Room – A telecommunications room is the termination of horizontal and backbone cables to compatible connecting hardware. A telecommunications room also provides a controlled environment to house telecommunications equipment, connecting hardware, and splice closures serving a portion of the building. The telecommunications room provides for the administration and routing of the equipment cable/cords from the horizontal cross connect to the telecommunications equipment.

Composite Health Care System (CHCS) - A DoD-wide Automated Information System (AIS) that includes the following modules: Patient Appointment System (PAS), Patient Administration (PAD), Laboratory (LAB), Radiology (RAD), Clinical Dietetics, Pharmacy (PHARM), and Nursing.

Composite Health Care System II (CHCS II) - Designed to replace CHCS, this composite system will provide integrated support to the clinical delivery processes within MHS MTF's including all aspects of ancillary, order entry, and documentation in peacetime and wartime.

DoD Space Planning Criteria for Health Facilities

Information Management

Computer Room - Space where the main computers and associated peripherals (e.g. tape drives, disk drives, line printer, etc.) are housed.

Note: The following is not a comprehensive list, but includes some items. There are other items that may be included and the programmer needs to verify the latest systems. Some of the systems that may be included in the computer room are: SNPMIS (Special Needs Program Management Information System), PHCA (Preventative Health Care Application), NMIS (Nutrition Management Information System), DVIS (Defense Vision Information System), DOEHRS (Defense Occupational and Environmental Health readiness System), DBSS (Defense Blood Standard System), CIS (Clinical Information System), CHCS II (Composite Health care System II), and CCEP (Comprehensive Clinical Evaluation Program).

Computer Server Room - A room to house the individual servers that would support one or two functional areas.

Defense Medical Logistics Standard System II (DMLSS II) - This composite system will provide integrated support to all logistics functions within the MHS environment including all aspects of facilities, equipment, and materiel management across the operational continuum.

Defense Medical Human Resource System (DMHRS) - Provides automated system support for calculating military and civilian labor time and cost for DoD health care activities.

Emergency Power - A system of electrical feeders and branch circuits meeting the requirements of the National Fire Protection Agency (NFPA 70), National Electric Code, and intended to supply alternate power to a limited number of prescribed functions vital to the protection of life and safety, with automatic restoration of electrical power within 10 seconds of power interruption.

Full-Time Equivalent (FTE): A work force equivalent to one individual working full time for a specific period, which may be made up of several part-time individuals or one full-time individual.

Local Area Network (LAN) - A means of connecting personal computers and/or terminals and sharing application programs, data and email through various cabling and switching themes so that users can communicate with each other or share common information. A LAN typically exists in a single building, hence the term "local."

Medical Expense and Performance Reporting System Expense Assignment System, Version IV (MEPRS EAS IV) - Provides support to standardized reporting of expenses, manpower, and workload data at the work center level within DoD facilities.

Medical Information Systems - An integrated computer system consisting of individual specialty applications modules; for example: Pharmacy, Radiology, Laboratory, Financial Management, and Records Management.

Multimedia Self-Help Area - An area used by all hospital staff in creating a wide variety of graphic materials such as posters, flyers, overhead transparencies, photographic slides. Typically this area would have PC's with appropriate graphics applications software to produce charts and graphs, as well as appropriate peripheral devices such as color printer/plotters, laser printers, color scanners, page readers, etc.

Office: Room Code OFA01 is a private office outfitted with standard office furniture. Room Code OFA02 is a private office outfitted with systems furniture. Room Code OFA03 is a cubicle outfitted with systems furniture.

PC Configuration Area. - The area in which personal computers are assembled, tested, and repaired. Testing software is accomplished in this area as well.

Multiplexor - A device that transmits two or more signals on a single circuit or frequency.

Personal Computer (PC) - A computing system designed for individual use.

DoD Space Planning Criteria for Health Facilities

Information Management

Peripheral Device - Accessory devices, such as a printer or modem, which is externally connected to a computer.

Uninterruptible Power Supply (UPS) - A system of batteries and capacitance power storage devices to preclude failure of critically important information processing systems. During an electrical power failure, it provides continuous power to a computer system, as well as and other essential building components, for a specified period of time.

2.4.3.POLICIES:

Communication Rooms: Include these rooms as programmed space (separate from electrical or mechanical areas) and provide sufficient quantity throughout every medical facility. "EIA/TIA 569" (or most current regulation) requires 110 nsf of communications room per 10,000 gross square feet of building area.

Central Alarm Room: A central alarm room will be provided in hospitals and medical centers. This room size will be based on the quantity of wall mounted graphic displays, annunciator displays and other monitoring and control equipment. Some examples of equipment in this room are: EMCS, elevator monitor, fire protection alarms, security systems, and medical gas alarms.

Central Computer Area: Network as many departments into one central computer area as possible, including dictation, lab, pharmacy, radiology services, and patient records systems. This would help consolidate staff and computer support areas. Other areas that may also be located in Information management are: paging, and teleconference rooms (VTC). Refer to Section 5.4 for Radiology and Nuclear Medicine computer requirements, as well.

Toilets, Lounges and Locker Areas: The criteria for toilets, lounges and locker rooms are provided in a separate section, Common Areas Section 6.1.

Administrative Offices: The office space required to provide administrative support to operate the clinic services will be provided in accordance with criteria for Section 2.1, General Administration.

2.4.4. PROGRAM DATA REQUIRED:

Program Data for Communications and Information:

Computer Room

Error! Bookmark not defined.List all approved systems which require a central server and/or a computer in a central computer room under the control of the MTF Information Management Officer.

Estimated square footage of each system listed above (note some systems can be loaded onto the same computer).

Are computers configured and is software installed and tested on computers at this MTF?

How many personal computers are projected to be in the MTF?

Is training on computer systems and/or software provided in this facility?

Does this facility include a requirement for data archiving?

Is there a need for uninterruptible power supply (UPS)? How many UPS components?

Storage (types of requirements? Explain).

Is there a multimedia self-help area?

If training facility, projected number of classes per year?

If training facility, average number of students per class.

Will the help desk/tech. support be on site or at a remote location?

Will radiology/nuclear medicine computer systems (PACS/DINPACS) be located in Information Management or in Radiology/Nuclear Medicine?

Will a high volume copy room for the entire medical facility be required?

DoD Space Planning Criteria for Health Facilities

Information Management

Is there a requirement for emergency power in the main computer room, in the communications room, in the central alarm room, in the audiovisual distribution systems room?

2.4.5. SPACE CRITERIA:

NOTE: GP indicates that a guideplate exists for that particular Room Code.

FUNCTION	ROOM CODES	AUTHORIZED		PLANNING RANGE/COMMENTS
		m ²	nsf	

STAFF AND ADMINISTRATIVE AREAS				
Chief, Information Management	OFA01	11.15	120	Private office, Standard Furniture. Per projected FTE
	OFA02	11.15	120	Private office, Systems Furniture. Per projected FTE
Secretary with Visitor Waiting	SEC01	11.15	120	Per projected FTE.
Private Office	OFA01	11.15	120	Per projected FTE requiring a private office.
	OFA02			
NCOIC/LCPO/LPO/SMT Office	OFA01	11.15	120	Per projected FTE.
	OFA02			
Computer Operator/Administrative Cubicle	OFA03	5.57	60	Per projected FTE. Systems Furniture.
Help Desk/Technician Cubicle	OFA03	5.57	60	Per projected FTE, if located on site.
Forms/Literature Storage	SRS01	9.29	100	One per clinic.
Conference Room (GP)	CRA01	23.23	250	Minimum use CRA01 One per department with eight officers or officer equivalents. For increase in size (CRA02 and CRO03) see Section 2.1
	CRA02	27.87	300	
	CRA03	37.16	400	
Staff Lounge (GP)	SL001	13.01	140	Minimum. See Section 6.1 for increased sizing.
Personal Property Lockers (GP)	LR001	1.86	20	For staff without a dedicated office/cubicle space. See Section 6.1 for size increase and for Changing Room, Lockers criteria.
Staff Toilets (GP)	TLTU1	4.65	50	Provide one if there are 10 or more staff in department. See section 6.1 for increase sizing and for male/female breakdown.
Copy Room	RPR01	9.29	100	Copier/Fax/Mailbox distribution for Information Systems Section use
Copy Room, High Volume	RPR02	11.15	120	One per facility can be located in other departments such as Administration. See section 2.1 for increasing size.
Equipment Supply Storage	SRE01	9.29	100	Minimum. Add 20 nsf for every 100 computer terminals. Maximum of 300.
Computer Equipment Storage	SRE01	18.58	200	Minimum, if computer repair/configuration and occurs at the MTF. Add one nsf for each computer in the MTF over 200. Maximum of 400.

DoD Space Planning Criteria for Health Facilities

Information Management

FUNCTION	ROOM CODES	AUTHORIZED		PLANNING RANGE/COMMENTS
		m ²	nsf	

COMPUTER ROOM

Medical Information Systems	CMP01	46.45	500	Minimum. Provide 500 nsf for MTF's less than 40,000 gsf. Provide an additional 35 nsf for each additional 1,000 gsf of MTF building area greater than 40,000 gsf. Maximum 2,000 nsf.
Computer Server Room	CMP02	5.57	60	One room for individual computer servers that support one or two functional areas
Radiology Computer Systems (PACS)	CMP03	37.16	400	Minimum. Provide 400 nsf for MTF's with six or less radiology rooms. Add 50 nsf for each additional radiology room. Determine location of system, either in this department or in Radiology/Nuclear Medicine.
Active Data Storage Room	CMP03	9.29	100	One per MTF.
Archive Storage	CMP03	9.29	100	If data archiving is stored/maintained in the MTF.
Uninterruptible Power Supply (UPS) Area	CMP01	5.57	60	Minimum. Provide 60 nsf per each UPS component. Verify if UPS required. Typically provided within the computer room.

COMPUTER ROOM SUPPORT

Computer Training Classroom	CLR03			See Section 2.3 Education and Training for sizing.
PC Configuration/Repair Area	BMWS1	13.94	150	Minimum of one station when personal computers are configured at the MTF. Add an additional station for every 200 computers in the MTF, minus two stations. Maximum of six stations.
Storage Area	SRS01	9.29	100	One for training material.
Multimedia Self-Help Area	OFA03	14.86	160	Provide only if required. For use by all staff in creating presentations.
Telephone Switch Room	COMC1	37.16	400	Provide if telephone switch programmed.
Communications Room	COMC1	10.22	110	Minimum. Distributed throughout the facility. One room per 10,000 nsf of building space. Consult EIA/TIA 569. Maximum runs to this room should not exceed 295 feet. Space provided in section 6.1 Common Areas.
Audiovisual Program Distribution	AVPD1	11.15	120	Minimum. A separate audiovisual distribution system room will be provided in hospitals and medical centers only.